

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

Drawings

The drawings had been objected to under 37 CFR 1.84(p)(4) because reference number 1250 is used to designate both the “optical sensor aperture shutter assembly” and the “light receiver mounting wall” in paragraph [366]. The light receiver mounting wall should be designated by reference number 1252 – as it is elsewhere throughout the specification –, and paragraph 366 has been amended above to correct this error.

The drawings are also objected to because reference numbers 1332 and 1342 are allegedly both used to designate the “MTU transport mechanism.” As explained in paragraph 368 and shown in Fig. 50, reference number 1332 designates the “MTU transport mechanism,” and reference number 1342 designates the “transport,” which is part of the MTU transport mechanism. Thus, reference numbers 1332 and 1342 are not referencing the same structure or assembly.

Specification/Claim Rejections – 35 USC § 112

The specification had been objected to as allegedly failing to provide proper antecedent basis for the claimed subject matter. Specifically, it had been contended in the Office Action that the specification fails to provide proper antecedent basis for “a receptacle vessel isolating device” in claims 1 and 8, “a structure” in claims 1 and 4, “receptacle vessel isolating ... including structure at least partially surrounding a receptacle vessel” in claim 1, and “a transport mechanism” in claim 2.

In a related matter, claims 1-14 had been rejected under 35 USC § 112 (2) because the specification allegedly does not describe “a receptacle vessel isolating device.” Also, claim 8 was said to be confusing and indefinite in that it is not clear to the Examiner what is the difference between the “receptacle vessel isolating ... including structure at least partially surrounding a receptacle vessel” in claim 1 and the receptacle positioner of claim 8.

In claim 1 (into which the subject matter of claim 4 has been incorporated) the term “structure” has been change to “housing.” The specification describes the housing (1372) at paragraph [0366].

With respect to the remaining subject matter identified as allegedly not properly provided for in the specification, applicants respectfully traverse the objection and rejection.

The applicant is not required to use the exact same terminology in the claims as used in the specification. The only requirement is that a person of ordinary skill in the art can, from reading the specification and claims, understand the subject matter that is being claimed. The present claims satisfy that standard.

By focusing only on specific terms taken from the claims, the Office Action fails to take into account the meaning that would be readily attributed to those terms by a person of ordinary skill when read in the context of the entire claim. For example, the terms “a receptacle vessel isolating device” and “receptacle vessel isolating ... including structure at least partially surrounding a receptacle vessel” in claim 1 can be readily understood when read in their full context within claim 1:

a receptacle vessel isolating device positioned adjacent said transport path and constructed and arranged to pivot between: (1) a first position permitting the plurality of adjacently-arranged receptacle vessels to be moved along said transport path; and (2) a second position operatively engaging one of said receptacle vessels disposed on said

transport path and operatively positioned with respect to said photosensitive device, said receptacle vessel isolating device being constructed and arranged to substantially prevent light from sources other than said operatively positioned receptacle vessel engaged by said receptacle vessel isolating device from being detected by said photosensitive device, said receptacle vessel isolating device being constructed and arranged to pivotally rotate between said first and second positions and including structure at least partially surrounding a receptacle vessel engaged by said receptacle vessel isolating device when said receptacle vessel isolating device is in said second position;

Read in that full context, a person of ordinary skill in the art would readily recognize that this language encompasses, for example, the receptacle vessel positioner assembly (1300) described in paragraphs [0383] – [0385], which includes a receptacle vessel positioner (1304) that pivots between retracted and fully extended positions and which includes a V-block (1310) with parallel sidewalls (1312) which prevent light from sources other than the receptacle vessel engaged by the receptacle vessel positioner from reaching the light receiver.

In fact, this is how the claim language was interpreted within the Office Action.

With respect to “a transport mechanism” in claim 2, that limitation has now been incorporated into claim 1. The complete context of the “transport mechanism” within claim 1 is as follows:

a transport mechanism constructed and arranged to move the plurality of adjacently-arranged receptacle vessels linearly along said linear transport path in such a manner as to operatively position each of the adjacently-arranged receptacle vessels with respect to said photosensitive device for a time duration sufficient to permit said photosensitive device to detect the amount of light emitted from the contents of the operatively positioned receptacle vessel

Read in full context, a person of ordinary skill in the art would readily recognize that this language encompasses, for example, the MTU transport mechanism (1332) described in paragraph [0392].

Claim 8 has been amended to recite “said structure at least partially surrounding a receptacle vessel engaged by said receptacle vessel isolating device comprises a V-block structure carried by said receptacle positioner.” Applicants respectfully submit that it is now clear that the V-block structure of claim 8 is a specific example of the structure at least partially surrounding a receptacle vessel of claim 1.

Claim 14 has been amended as suggested in the Office Action.

In view of the above, applicants respectfully request that the objection to the specification and the rejections of the claims under § 112(2) be withdrawn.

Claim Rejections – 35 USC § 102/103

Claims 1-3 and 8-9 had been rejected under 35 USC § 102(b) as anticipated by Schacher (US 5,384,094). Claims 1-2 and 10 had been rejected as anticipated by Smith (US 4,826,660). Claims 10-11 had been rejected under 35 USC § 103(a) as unpatentable over by Schacher (US 5,384,094) in view of Scherzer (US 3,663,816). Claims 4, 12, and 13 had been rejected as unpatentable over by Schacher (US 5,384,094) in view of Babson (US 5,885,529). Claims 5-7 had been rejected as unpatentable over by Schacher (US 5,384,094) in view of Babson (US 5,885,529) and further in view of Wihlborg (US 5,445,794). Finally, Claim 14 had been rejected as unpatentable over by Schacher (US 5,384,094) in view of Wihlborg (US 5,445,794).

Applicant respectfully submits that the independent claim 1, as amended, is not anticipated nor rendered obvious by the cited art, and accordingly, requests that the rejection of claim 1, and the remaining claims which depend from claim 1, be withdrawn.

Independent claim 1 has been amended to recite a housing defining a linear, horizontal transport path and having an inlet for admitting vessels into the housing and an outlet through which vessels are ejected from the housing, the transport path extending linearly between said

inlet and said outlet. This aspect of the invention was previously recited in dependent claim 4, although not limited to a linear path, and claim 4 has now been cancelled. Claim 1 has also been amended to recite a transport mechanism constructed and arranged to move the adjacently-arranged receptacle vessels linearly along the transport path in such a manner as to operatively position each of the adjacently-arranged vessels with respect to the photosensitive device. This aspect of the invention was previously recited in dependent claim 2, except claim 2 was not limited to a linear path, and claim 2 has now been cancelled.

None of the cited references, whether taken alone or in combination, teach or suggest the particular combination of features of the invention as recited in independent claim 1.

The Office Action contends that Schacher discloses a rotor magazine 1 that defines a horizontal transport path along which cells 2 are moved through the instrument. If it is assumed that the transport path is the path defined by movement of cells 2 on the magazine 1, then the path is circular rather than linear. See, e.g., col. 3, lines 15-20. If, alternatively, the transport path is the movement of cells 2 from the magazine 1 to device 33 by the change-over and positioning device, then the transport device is constructed and arranged to accommodate only one cell 2 at a time. See, e.g., col. 4, line 1 *et seq.* This is in contrast to the claimed invention, as recited in claim 1, which includes a linear path along which a plurality of adjacently-arranged receptacle vessels are moved through the instrument.

The Office Action contends that Smith discloses a structure 72 having a transport path. However, structure 72 is a carousel and, for this reason, cannot define a linear transport path. See, e.g., col. 7, line 65, through col. 8, line 24. Smith describes reagent packages 75 held in radial slots 74 of the carousel 72. The system disclosed by Smith is only capable of detecting light from the contents of outer well 78 of the reagent package 75. Additionally, the detector

assembly 20 itself does not include a transport path, since wells 78 are presented to the detector assembly 20 but are not transported through the detector assembly 20. See, e.g., Figures 5-7.

Thus, Smith does not teach or suggest an instrument having a housing defining a linear, horizontal path along which a plurality of adjacently-arranged receptacles are moved from an inlet to the housing to the outlet from the housing along a linear path.

The Office Action contends that Babson discloses an analyzer having an inlet 201 and outlet (not specifically identified) with a detector system disposed adjacent the transport path 215. Babson discloses a detection station 215 that includes a reaction tube reading station 216 having a PMT 216a for photometric readings of reaction tubes fed to the detection station 215 by a luminometer chain 215a. See, e.g., col. 8, line 21 *et seq.* While Babson discloses the use of a shutter at col. 9, line 21 *et seq.*, there is no indication that the detection station has inlet and outlet doors, as recited in claim 5.

The Office Action contends that Wihlborg discloses a door assembly that moves between an open position permitting passage of a test tube into a chamber and a closed position which closes off the chamber to ambient light. Wihlborg discloses mated components 1, 2, where component 2 rotates about fixed component 1 to receive a test tube 25 into a measuring chamber 5. See, e.g., col. 1, lines 45-53. Test tubes 25 are admitted or discharged from the chamber 5 under the action of gravity. See, e.g., col. 2, lines 24-27; and col. 3, lines 1-30. Accordingly, to the extent that the device defines a path along which receptacles are transported, the path is vertical, not horizontal, and it accommodates only a single test tube at a time; it does not accommodate a plurality of adjacently-arranged receptacle vessels, as in the claimed invention.

Accordingly, the cited references, whether taken alone or in combination, do not teach or suggest the claimed combination of features. Thus, the invention of claim 1, as well as the

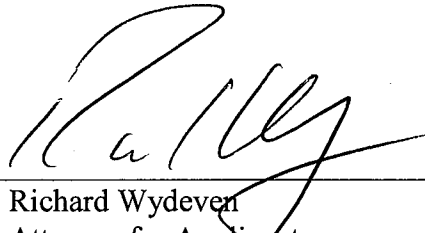
inventions of all claims depending from claim 1, are patentable over the cited art, and applicant respectfully request that the prior art rejections be withdrawn.

New claim 15 is directed to a system including the features of the instrument of claim 1 combined with a reaction receptacle comprising a plurality of interconnected, adjacently-arranged receptacle vessels. Claim 15, and new claims 16- 25, are believed to be allowable for the same reasons discussed above for claims 1, 3, and 5-14.

Based on the foregoing remarks, applicants submit that the instant application is now in condition of allowance and respectfully request allowance of the instant application.

Respectfully submitted,

Date: 8/8/07

By 
Richard Wydeven
Attorney for Applicants
Registration No. 39,881
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
Suite 800, 1425 K Street, N.W.
Washington, D.C. 20005
Telephone: (202)783-6040